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10/777,634	02/13/2004	Timothy Patrick Jon Perry	52493.000368	5377

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EXAMINER

PHONGSVIRAJATI, POONSIN

ART UNIT

PAPER NUMBER

3686

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/777,634

Applicant(s)

PERRY ET AL.

Examiner

SIND PHONGSVIRAJATI

Art Unit

3686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of Claims

1. In response to communications filed on 08/12/2009, claims 1, 10, and 12 are currently amended. Claims 1-20 are pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 1 recites the limitations, "the rules engine determines whether each of the at least one data element has been fully validated as clean data", "the rules engine generates an exception task if it is determined that at least one data element is not clean", "the rules engine receives a resolution to the exception task, thereby enabling validation of the at least one data element". All of the above limitations are directed towards method steps of performing the disclosed invention, however, the other limitations establish a structure which infers that claim 1 is an apparatus. It is unclear as to whether claim 1 discloses a method or an apparatus (IPXL Holdings v. Amazon.com, Inc., 430 F.2d 1377, 1384, 77 USPQ2d 1140, 1145 (Fed. Cir. 2005)(MPEP

2173.05(p))). Claims 2-9 fail to cure the deficiencies of claim 1 and incorporate the same rejection and reasoning as claim 1.

4. Claim 10 recites the limitations, "the rules engine determines whether each of the at least one data element has been fully validated as clean data", "the state machine generates workflow tasks to enable case progression through the system", "the state machine receives responses to said workflow tasks", and "the state machine determines case progression based upon said responses" All of the above limitations are directed towards method steps of performing the disclosed invention, however, the other limitations establish a structure which infers that claim 1 is an apparatus. It is unclear as to whether claim 1 discloses a method or an apparatus (IPXL Holdings v. Amazon.com, Inc., 430 F.2d 1377, 1384, 77 USPQ2d 1140, 1145 (Fed. Cir. 2005)(MPEP

2173.05(p))). Claim 11 fail to cure the deficiencies of claim 1 and incorporate the same rejection and reasoning as claim 10.

5. To overcome this rejection, Examiner suggest Applicant modify the claim language to recite the claim elements being modified by functional language. For example: --a raw database **for** electronically storing insurance application related documents;--, --a rules engine **configured to** determine whether each of the at least one data element has been fully validated as clean data--, etc. Applicant is welcome to call the Examiner for additional clarification.

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. The 101 rejection from the previous office action to claims 12-17 have been withdrawn given Applicant's amendments.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 3-12, 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 5,235,654) in view of Scanlon (US 5,850,480).

4. As to **Claim 1**, Anderson teaches a system for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), the system comprising:

- a. a raw data database electronically storing insurance application related documents (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database);
- b. a rules engine that converts the documents into at least one data element having a common format (Anderson, Fig. 4A, Fig. 7A-7E, col. 21 lines 25 to col. 22 line 13);
- c. the clean data is stored in an operational database for use in application processing (Anderson, col. 3 lines 24-33, col. 33 lines 50-66);
- d. the rules engine generates an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63, col. 27 lines 3-8); and
- e. the rules engine receives a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

Anderson does not specifically disclose the rules engine determining whether each of the at least one data element has been fully validated as clean data. Scanlon does teach the rules engine determining whether each of the at least one data element has been fully validated as clean data (Scanlon, Figs. 3 and 7E, col. 31 lines 42-48 and col. 33 lines 16-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included fully validating each data element as clean data for the motivation for OCR error correction (Scanlon, Abstract).

5. As to **Claim 3**, Anderson teaches the system of claim 1, further comprising: a state machine that monitors clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), wherein the state machine generates workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), wherein the state machine receives responses to said workflow tasks (Anderson, col. 12 lines 1-11), and wherein the state machine determines case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

6. As to **Claim 4**, Anderson teaches the system of claim 1, further comprising: a state machine that monitors data converted by the rules engine (Anderson, col. 12 lines 54-65), wherein the state machine generates data tasks to enable data verification (Anderson, Fig. 4C), wherein the state machine receives responses to said data tasks (Anderson, Fig. 4C step 204), and wherein the state machine verifies data for forwarding to the operational database based upon said responses (Anderson, col. 32 lines 49-67).

7. As to **Claim 5**, Anderson teaches the system of claim 1, wherein application-related documents include electronic documents and paper documents (Anderson, col. 3 lines 34-41 and col. 4 lines 13-14).

8. As to **Claim 6**, Anderson teaches the system of claim 1, wherein the documents of a first type are stored in a first raw data database and documents of a second type are stored in a second raw data database (Anderson, Fig. 1R element 35).

9. As to **Claim 7**, Anderson teaches the system of claim 1, wherein the exception task instructs a person to perform a task to resolve the exception (Anderson, Fig. 1R element 32, col. 33 lines 8-22).

10. As to **Claim 8**, Anderson teaches the system of claim 1, wherein the exception task instructs an automated process to perform a task to resolve the exception (Anderson, Fig. 1R element 32, col. 32 lines 55-67).

11. As to **Claim 9**, Anderson teaches the system of claim 1, further comprising: the rules engine determines if additional information is required to validate a data element (Anderson, col. 7 lines 5-43, col. 33 lines 8-22); and the rules engine generating an exception task to obtain the additional information (Anderson, col. 6 lines 56-63).

12. As to **Claim 10**, Anderson teaches a system for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), the system comprising: a raw data database electronically storing insurance application related documents (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database); a rules engine that converts the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); the clean data is stored in an operational database for use in application processing (Anderson, col. 3 lines 24-33); a state machine that monitors clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), wherein the state machine generates workflow tasks to enable case progression through the system, the tasks based upon said clean

data and rules engine outputs (Anderson, Fig. 4A), wherein the state machine receives responses to said workflow tasks (Anderson, col. 12 lines 1-11), and wherein the state machine determines case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

Anderson does not specifically disclose the rules engine determining whether each of the at least one data element has been fully validated as clean data including; determining that syntax is correct; determining that required information is present; and determining that formatting is proper. Scanlon does teach the rules engine determining whether each of the at least one data element has been fully validated as clean data (col. 31 lines 42-48 and col. 33 lines 16-31) including; determining that syntax is correct (col. 25 lines 57-64); and determining that formatting is proper (col. 3 lines 60-67, col. 25 lines 57-64). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included fully validating each data element as clean data for the motivation for OCR error correction (Scanlon, Abstract).

The combination of Anderson and Scanlon does not specifically disclose wherein such validation including determining that required information is present. However, the Examiner takes official notice that it is well known in the art to determine whether required information is present. For example, most forms such as contact information will not be entered into a system until all the required information is present in order to submit said contact information into the system. It would have been obvious to one of ordinary skill in the art at the time of the invention to include determine whether required

information is present within the disclosure of Anderson and Scanlon for the motivation for completing forms to be filled out.

13. As to **Claim 11**, Anderson teaches the system of claim 10, wherein the rules engine generates an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and the rules engine receives a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

14. As to **Claim 12**, Anderson teaches a method for routing and processing insurance related data, the method performed by a tangibly embodied computational device, the method comprising:

- a. receiving, by the computational device, insurance application-related documents from external sources (Anderson, col. 3 lines 34-56),
- b. storing, by the computational device, the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database);
- c. converting, by a rules engine in the computational device, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606);
- d. storing, by the computational device, clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33);

- e. generating, by the computational device, an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and
- f. receiving, by the computational device, a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

Anderson does not specifically disclose the rules engine determining whether each of the at least one data element has been fully validated as clean data. Scanlon does teach the rules engine determining whether each of the at least one data element has been fully validated as clean data (col. 31 lines 42-48 and col. 33 lines 16-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included fully validating each data element as clean data for the motivation for OCR error correction (Scanlon, Abstract).

As to **Claim 14**, Anderson teaches the method of claim 12, further comprising: monitoring clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), generating workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), receiving responses to said workflow tasks (Anderson, col. 12 lines 1-11), and determining case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

15. As to **Claim 15**, Anderson teaches the method of claim 12, wherein the exception task instructs a person to perform a task to resolve the exception (Anderson, Fig. 4C).

16. As to **Claim 16**, Anderson teaches the method of claim 12, wherein the exception task instructs an automated process to perform a task to resolve the exception (Anderson, col. 7 lines 14-20 and see section "Sequential repair of character recognition errors").

17. As to **Claim 17**, Anderson teaches the method of claim 12, further comprising: determining if additional information is required to validate a data element (Anderson, col. 7 lines 5-43, col. 33 lines 8-22); and generating an exception task to obtain the additional information (Anderson, col. 6 lines 56-63).

18. As to **Claim 18**, Anderson teaches a computer-readable medium incorporating instructions for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), comprising: one or more instructions for receiving insurance application-related documents from external sources (Anderson, col. 3 lines 34-56), one or more instructions for storing the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19); one or more instructions for converting, by a rules engine, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); one or more instructions for determining whether each of the at least one data element has been fully validated as clean data (Anderson, col. 3 lines 24-33); one or more instructions for storing clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33); one or more

instructions for generating an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and one or more instructions for receiving a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

19. As to **Claim 19**, Anderson teaches a computer-readable medium incorporating instructions for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), comprising: one or more instructions for receiving insurance application-related documents from external sources (Anderson, col. 3 lines 34-56), one or more instructions for storing the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19); one or more instructions for converting, by a rules engine, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); one or more instructions for determining whether each of the at least one data element has been fully validated as clean data (Anderson, col. 3 lines 24-33); one or more instructions for storing clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33); one or more instructions for monitoring clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), one or more instructions for generating workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), one or more instructions for receiving responses to said workflow tasks (Anderson, col. 12 lines 1-11), and one

or more instructions for determining case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

20. As to **Claim 20**, Anderson teaches the system of claim 19, further comprising: one or more instructions for generating an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and one or more instructions for receiving a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

21. Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 5,235,654) in view of in view of Scanlon (US 5,850,480) in further view of Applicant Admitted Prior Art (AAPA).

22. As to **Claims 2 and 13**, the combination of Anderson and Scanlon does not specifically disclose that the common format is extensible Markup Language. However, it is well known to those of ordinary skill in the art, that, the coded data in the application program storage database Anderson discloses (Anderson, Fig. 1R element 35) can be structured using any number of general-purpose database storage methodologies, including a XML markup language. Applicant is failed to adequately traverse Examiner's taking of official notice as required by MPEP 2144.03(C) and the said official notice will be taken as Applicant Admitted Prior Art.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to include storing the data elements and attributes inside an XML document, as is well known to do, in order to organize the folders, tables, fields, and

retrieved data elements of Anderson's invention (Anderson, col. 35 line 65 to col. 36 line 28), since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Response to Arguments

8. Applicant's arguments filed 08/12/2009 have been fully considered but they are not persuasive.

In respect to Applicant's traversal of the 112(2) rejection, Applicant is advised to view the 112(2) rejection above for suggestions for overcoming the said 112(2) rejection.

The 101 rejection from the previous office action to claims 12-17 have been withdrawn given Applicant's amendments.

As to Applicant's traversal regarding the 103 rejection, Applicant asserts:

As an initial matter, and regarding the alleged teachings of Anderson, as set forth above, the Office Action asserts "the rules engine generates an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63)". However, based on a review of such disclosure of Anderson, Applicant submits that it is unclear what the Office Action interprets as teaching the claimed "exception task." Applicant notes that Anderson describes:

... In performing the character recognition process, the resultant coded data may contain errors which are analyzed by the artificial intelligence error correction processor 28, also shown in FIG. 1. The sequence of forms recognition and field extraction, yields the MGDS 50A, as is shown in FIG. 1A. The MGDS 50A is then transferred to the character recognition processor 26, along with the extracted field images 10". ...
(emphasis added)

However, from such disclosure, it is fully unclear what would constitute the claimed "exception task." Therein, for example, Anderson describes the "resultant coded data may contain errors which are analyzed by the artificial intelligence error correction processor 28..." However, such described analyzing may be performed in any of a wide variety of manners. Such described analysis of Anderson clearly fails to fairly teach the claimed "exception task" - so as to support the 35 U.S.C. 103 rejection.

Examiner respectfully disagrees. Applicant is encouraged to review the corresponding disclosure in reference to the artificial intelligence error correction processor. The artificial intelligence error correction processor handles the first repair for data that is determined to contain errors (reads on, "not clean") (col. 27 lines 3-8). Applicant has not provided any controlling definition regarding the claimed element, "exception task", therefore, Examiner applies the broadest reasonable interpretation as to the functionality of the "exception task" in view of the claim language. It is interpreted that

the limitation recites a task being generated by a rules engine if it is determined that at least one data element is not clean.

Applicant further asserts:

As a further deficiency, Applicant notes that claim 1 recites various processing associated with the claimed "at least one data element". The assertions in support of the rejection, as set forth above, allege manipulation by each of Anderson and Scanlon of such "data element." That is, for example, the Office Action asserts that Anderson teaches manipulation of such data element in clauses (b), (d) and (e), as set forth above. Further, the Office Action asserts that "Scanlon does teach the rules engine determining whether each of the at least one data element has been fully validated as clean data."

Again, Examiner must inquire as to the controlling definition of the Applicant's claim element, "data element". The claim language is so broadly written that a "data element" could be read in any number of ways. For example, the limitation reciting, "a rules engine that converts the documents into at least one data element having a common format" could be interpreted as the data application (reads on "rules engine") that converts the documents into character text (reads on "at least one data element") in English (reads on "a common format").

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIND PHONGSVIRAJATI whose telephone number is (571) 270-5398. The examiner can normally be reached on Monday - Thursday 8:00am-5:00pm (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry O'Connor can be reached on (571) 272-6787. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or (571) 272-1000.

/S. P./
Examiner, Art Unit 3686

30 October 2009

/Gerald J. O'Connor/
Supervisory Patent Examiner
Group Art Unit 3686